



# Revolutionize visibility: Build, test, and learn with enterprise digital twins

### In today's data-driven environment, achieving operational excellence requires a comprehensive understanding of your physical assets and processes.

Ideal for architecture, engineering, and construction environments, our innovative workstation technology empowers you to gain the visibility you need by creating a digital twin.



### Power in partnership: Upgrade productivity

You can create digital twins by combining Lenovo's P Series workstations and ThinkReality VRX headset, with NVIDIA RTX professional GPUs. By visualising, sharing, and collaborating in real time, you can increase productivity from concept and development to delivery.

# A risk-free, virtual testing ground

A digital twin is a virtual replica of a physical asset, space, or process which reflects the laws of physics and is connected to real-world data through sensors and technology. It enables organisations to simulate, build, test, analyse and share different scenarios from a single source of truth before making changes in the real world.

This provides valuable insights into product design, workflow optimisation, and predictive maintenance needs while improving collaboration. These insights inform better decisions and help you make the business case for future investments.

By creating a risk-free, virtual testing ground, you can demonstrate how innovations could improve KPIs like customer satisfaction, product quality, operational efficiency, and cost savings.



### Use case

## **Empowering concept design and testing**



#### **Concept design**

Work fast and efficiently to iterate initial ideas and build out your bespoke product or service design quickly and easily.



#### **Design review**

Teams, suppliers, and consultants can review, create prototypes, and make changes to interactive, ray-traced visualisations of designed concepts with great physical precision and accuracy, in a secure environment.



#### Testing

Virtually stress-test a concept in simulation, in real time, without additional costs or physical resources.



#### Training

Immersive 3D scenario testing allows you to enhance employee training while prioritising safety and minimising risks. By training in a risk-free virtual environment, you can avoid costly, on-site simulations and maintain high standards in incident response.



#### **Global collaboration**

Reduce the likelihood of design flaws and decision-making delays by sharing the concept view and testing results with everyone, anywhere in the world.

# Improving efficiency in production lines and supply chains

#### Communication

Quickly share and review engineering changes with teams, including geographically dispersed teams and suppliers, using interactive, photo-realistic models to make decisions faster.



#### **Production simulations**

Ensure you stay compliant and identify inefficiencies using highly specific layouts (while collaborating with stakeholders) to evaluate physical objects or workflows, such as production lines.



#### **Machine testing**

Check the performance of new machinery or production line configurations without impacting productivity.



#### **Robotics training**

Improve warehouse logistics and manufacturing processes with NVIDIA's AI training and inference models which prepare robots for every eventuality and train them within the same digital twin environment that they'll be used in – with zero downtime.

### **Uncover your perfect match**

Powerful workstations like the ThinkStation PX include up to 120 CPU cores and four dual-slot GPUs while still leaving one slot for up to 25GB networking.

Our portfolio of workstations also give you access to NVIDIA Omniverse, a platform of APIs and SDKs that enable developers to connect and develop OpenUSD applications. We can work through your needs with you and provide a recommendation for the devices that best fit out your business with Omniverse Enterprise.

Get in touch with your Lenovo representative, or contact us via our website and get a head start on implementing digital twins into your business.

www.lenovo.com/digital-twins



